



*Total Solution Provider in Saw Device*

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# SA827CM

Wireless, RF SAW Filter  
Revision 1: October ,2009



- Electrical Characteristics
  - Package Dimensions
  - Testing Environment
  - Frequency Characteristics
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## □ Electrical Characteristics

### Maximum Ratings

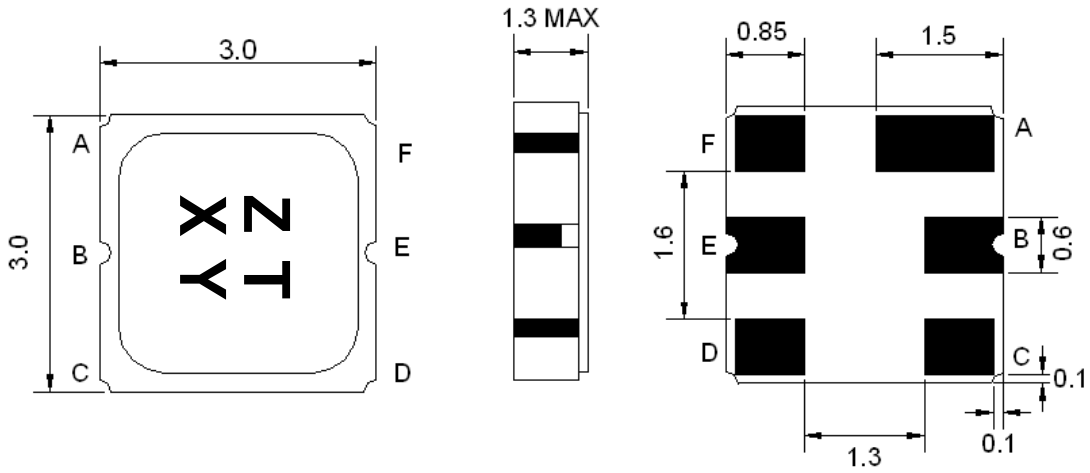
| Parameters Description                         | Unit            | Minimum | Typical   | Maximum |
|--|-----------------|---------|-----------|---------|
| Operating Temperature Range                    | °C              | 0       | -         | +70     |
| Storage Temperature Range                      | °C              | -40     | -         | +85     |
| Maximum DC Voltage                             | V               | -       | -         | 0       |
| Maximum Input Power                            | dBm             | -       | -         | 10      |
| Source Impedance (single ended) <sup>(1)</sup> | Ω               | -       | 50        | -       |
| Load Impedance (single ended) <sup>(1)</sup>   | Ω               | -       | 50        | -       |
| Package type & size                            | M               |         |           |         |
| Length x Width                                 | mm <sup>2</sup> | -       | 3.0 x 3.0 | -       |
| Height   | mm              | -       | -         | 1.3     |

### Electrical Specification

| Parameters Description                   | Unit              | Minimum | Typical | Maximum |
|--|-------------------|---------|---------|---------|
| Center Frequency (Fo)                    | MHz               | -       | 827.4   | -       |
| Insertion Loss within 825.4 ~ 829.4MHz   | dB                | -       | 2.5     | 3.0     |
| Amplitude Ripple within 825.4 ~ 829.4MHz | dB <sub>p-p</sub> | -       | 0.3     | 0.8     |
| <b>Attenuation</b>                       |                   |         |         |         |
| 750.0 ~ 810.0 MHz                        | dB                | 40      | 50      | -       |
| 816.05 MHz ( Fo-11.35MHz )               | dB                | 10      | 20      | -       |
| 838.75 MHz ( Fo+11.35MHz )               | dB                | 10      | 20      | -       |
| 845.0 ~ 900.0 MHz                        | dB                | 35      | 44      | -       |

**Notes :** (1) No Matching Network (Ref. Testing Environment Circuit as shown below).

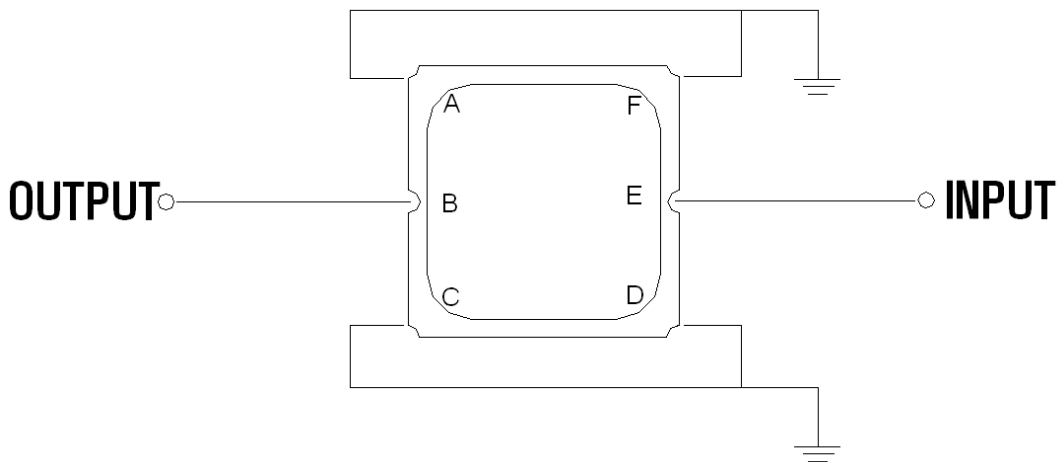
**□ Package Dimensions**



| Marking Descriptions |                      |
|----------------------|----------------------|
| Z                    | Wireless Application |
| T                    | Series Number        |
| X                    | Date Code(Year)      |
| Y                    | Date Code(Month)     |

| Pin Description |           |
|-----------------|-----------|
| A, C, D, F      | Ground    |
| B               | In or Out |
| E               | Out or In |

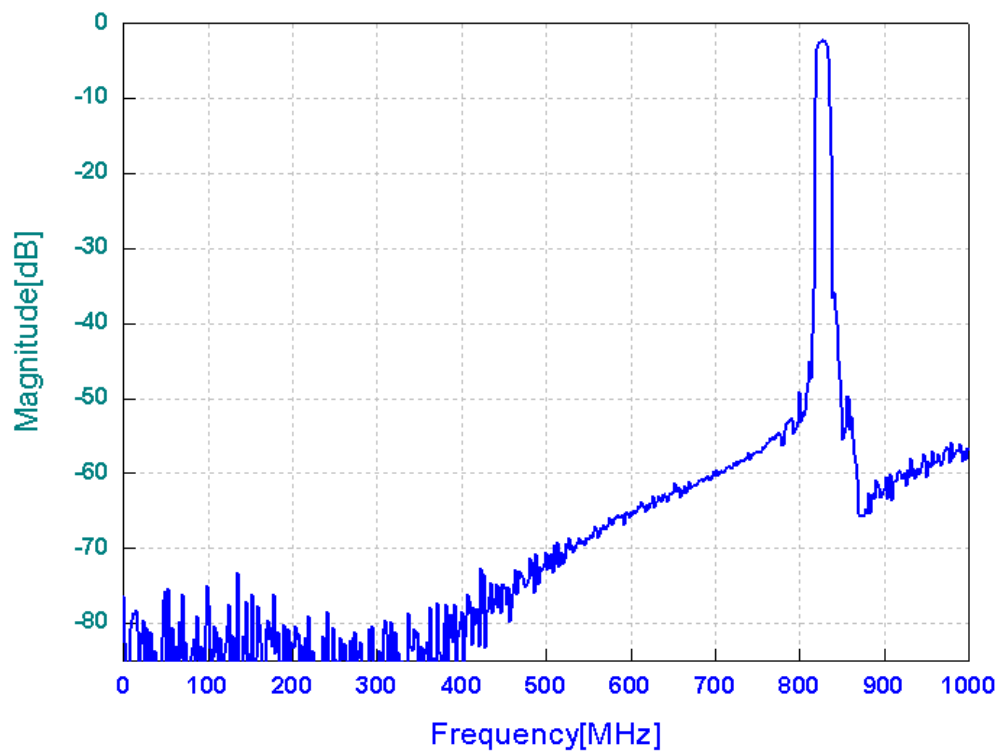
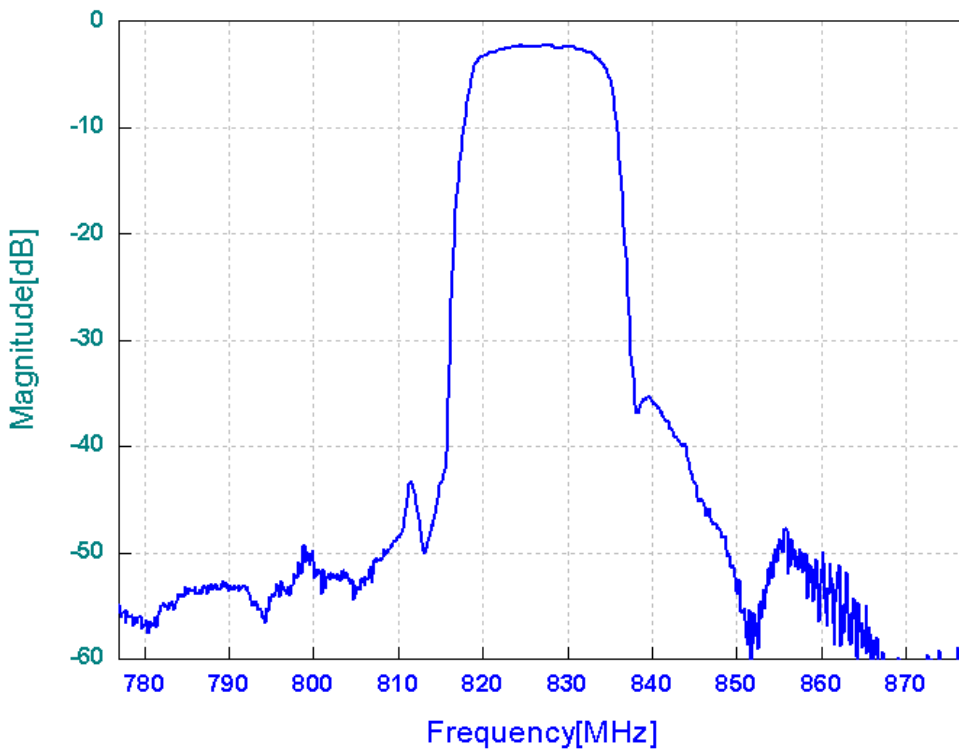
**□ Testing Environment**



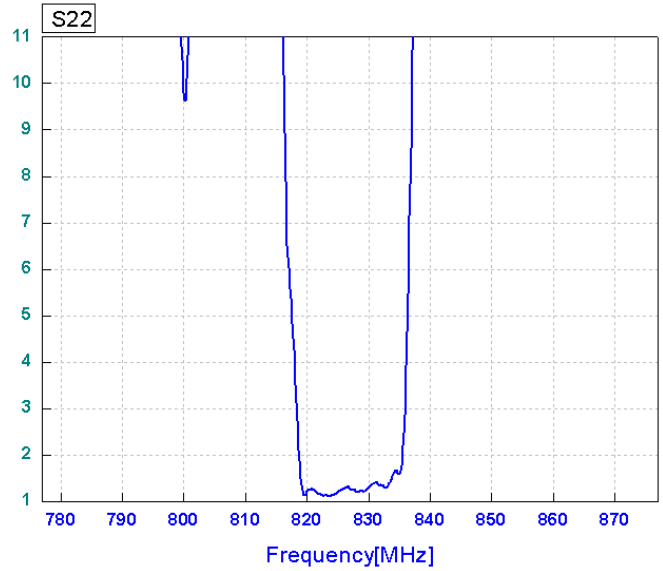
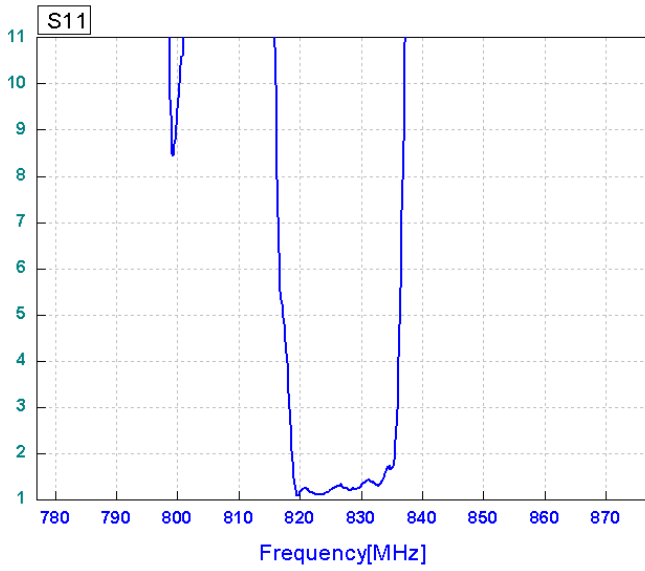
Source & Load Impedance: 50 Ω

**□ Frequency Characteristics**

Frequency Response



### VSWR



### Smith Chart

